

## Remarks

This is in response to the Final Action dated April 9, 2008.

The Applicant has amended claims 1, 10, 11, 12, 17, 18 and 19. Support for these claim amendments can be found, for example, in paragraph [0051]. However, the Applicant respectfully submits that these amendments are not necessary for patentability as we respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness for the reasons given below.

In the Final Action, the Examiner has maintained his rejections to the claims. In the response to arguments section that begins on page 9 of the Final Action, we note that the Examiner cites case law from 1969, 1971 and 1975 and does not rely on any more recent case law from the Federal Circuit or the Supreme Court. However, as the rejection is deficient for the reasons set out below, the Applicant believes it is unnecessary to set out more recent case law in order to overcome the rejection.

We respectfully submit that the rejection fails to establish a *prima facie* case of obviousness. The Examiner states that it is what references suggest to one skilled in the art rather than their specific disclosures which dictate whether they can be combined for the purposes of an obviousness rejection. The Examiner then takes the position that because Scott mentions that his backhaul signal from the antenna to the amplifier for the base station could be transmitted over fiber optic cable, Lam's teaching of the use of optical circulators in a WDM passive optical network in order to overcome dispersion would suggest to a person skilled in the art that such circulators would be useful in Scott's antenna diversity technique for a wireless communication system. The Examiner states that it would have been obvious to add a plurality of circulators, such as suggested by Lam, to the system of Scott in order to avoid delay in building up dispersion in the signal pulses (page 3 of the Final Action). This is repeated on page 10 of the Final Action wherein the Examiner cites Scott (column 4, lines 41-43) as proposing the use of a fiber optic cable for the transmission of a received signal from a base station antenna to the base station. Dispersion is a major issue in long haul WDM fiber optic networks where optical signals traverse long spans of fiber. However,

dispersion is simply not an issue in a backhaul cable of Scott's system due the short length of cable that would be used in a base station. Indeed, the very section of Lam cited by the Examiner, states that dispersion introduced into the optical signal increases with the transmission distance (see column 11, lines 35-37). Accordingly, we respectfully submit that a person skilled in the art in looking at Scott's system would have no motivation to combine a system designed to avoid dispersion in long-haul fiber optic WDM communications into the system taught by Scott, and certainly would not produce the system as claimed. Accordingly, we respectfully submit that the rejection to claims 1 to 19 under 35 U.S.C. 103(a) as being unpatentable over Scott in view of Lam fails to establish a *prima facie* case of obviousness, and should be withdrawn. Accordingly, the amendments to the claims are not necessary for patentability.

Turning now to the rejection based on Scott in view of Weber, once again the rejection fails to establish a *prima facie* case of obviousness. The very section of Weber cited by the Examiner teaches the use of the circulators to combine multiple frequencies into a high frequency group (see column 3, lines 29-35). This is simply not relevant to the claimed invention and we respectfully submit that a person skilled in the art looking at Scott would not be motivated to add the circulators of Weber to produce a system for processing a number of input signals having a common frequency. Indeed, the very reason for including the circulators as taught in Weber (that is, to combine signals of different frequencies) would suggest to a person skilled in the art that such circulators are not needed in a system having a common frequency as taught by Scott and as claimed. Accordingly, once again we respectfully submit that the rejection is deficient and fails to establish a *prima facie* case of obviousness and should be withdrawn. Accordingly, once again we respectfully submit that the claim amendments are not necessary for patentability.

In any event, the amended claims are now directed to serrodyne modulators and the dependent claims add features which are neither taught nor suggested by the prior art. Accordingly, we respectfully submit that the pending claims are patentable and a Notice of Allowance is hereby requested.

Appln. no. 10/642,649  
Response dated August 11, 2008  
Office Action dated April 9, 2008

**The Commissioner is hereby authorized to debit \$930.00 from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP, representing the fees for an RCE and the one month extension of time fee.**

The Commissioner is hereby authorized to charge any additional fees, and credit any over payments to Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.

Respectfully submitted,

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